

On calculation of the width of the forbidden zone and some highly
complex semiconductors. D. I. Belvtskiy.
D. P. Belotskiy.

Physico-chemical investigations of some cross sections in the systems
Cd-In-Sb; Cd-Zn-Sb; Zn-Sb-Bi; Cd-Sb-Bi. D. P. Belotskiy, M. S. Dundich,
I. N. Antonov.

Report presented at the 3rd National Conference on Semiconductor Compounds,
Kishinev, 16-21 Sept 1963

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BELOTSKIY, D.P.; KHOKHOL, M.P.

Viscosity, density, and conductance in the system sulfuric acid - citric acid - water. Zhur. neorg. khim. 8 no.6:1495-1497 Je '63. (MIRA 16:6)

(Sulfuric acid) (Citric acid)

BELOTSKIY, D.P.; KHOKHOL, M.F.

System $\text{MgSO}_4 - \text{H}_2\text{SO}_4 - \text{H}_2\text{O}$. Zhur.neorg.khim. 8 no.4:1014-1016
Ap '63. (MIRA 16:3)
(Magnesium sulfate) (Sulfuric acid)

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ACC NR: AP7008062

SOURCE CODE: UR/0073/67/033/001/0014/0016

AUTHOR: Belotskiy, D. P.; Antipov, I. N.; Krylyuk, N. V.

ORG: Chernovtsy State University (Chernovitskiy gosudarstvennyy universitet)

TITLE: Synthesis of single crystals and study of the $\text{SbI}_3\text{-BiI}_3$ system by using the fusibility and electrical resistance methods.

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 33, no. 1, 1967, 14-16

TOPIC TAGS: single crystal growing, antimony compound, bismuth compound, iodide, resistivity

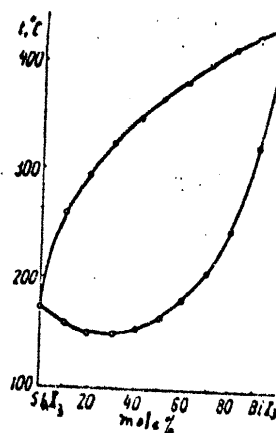
ABSTRACT: SbI_3 and BiI_3 single crystals were prepared from spectroscopically pure Sb and Bi and iodine by the Bridgman method in a vertical furnace with three temperature zones. The melting point diagram of the $\text{SbI}_3\text{-BiI}_3$ system was studied by plotting heating and cooling curves. The diagram obtained (see Fig. 1) showed the system to be characterized by a complete solubility in both the liquid and solid state. The dependence of the log of the resistivity on the reciprocal temperature was found to be linear in SbI_3 single crystals. The presence of BiI_3 changes this function completely, and the latter keeps changing with increasing BiI_3 content. An isotherm of the resistivity of the $\text{SbI}_3\text{-BiI}_3$ system at 100°C showed a peak at 20 mole % BiI_3 ; this is attributed to a certain ordering of the structure. Orig. art. has: 5 figures.

Card 1/2

UDC: 541.1+54.141

ACC NR: AP7008062

Fig. 1



SUB CODE: 07/ SUBM DATE: 23Jan65/ ORIG REF: 007/ OTH REF: 001

Card 2/2

PERMYAKOV, V.G.; TODOROV, R.P.; KOSHOVNIK, G.I.; BELOTSKOY, A.V.

Effect of homogenizing on the distribution of silicon and the mechanical properties of magnesium cast iron with a gray fracture. Izv. vys. ucheb. zv.; chern. met. no.10:143-147 '60.
(MIRA 13:11)

1. Kiyevskiy politekhnicheskii institut.
(Cast iron--Metallography) (Annealing of metals)

BELOTSVETOV, A.V.; LIRTSMAN, S.M.; DECHEV, Kh.I.

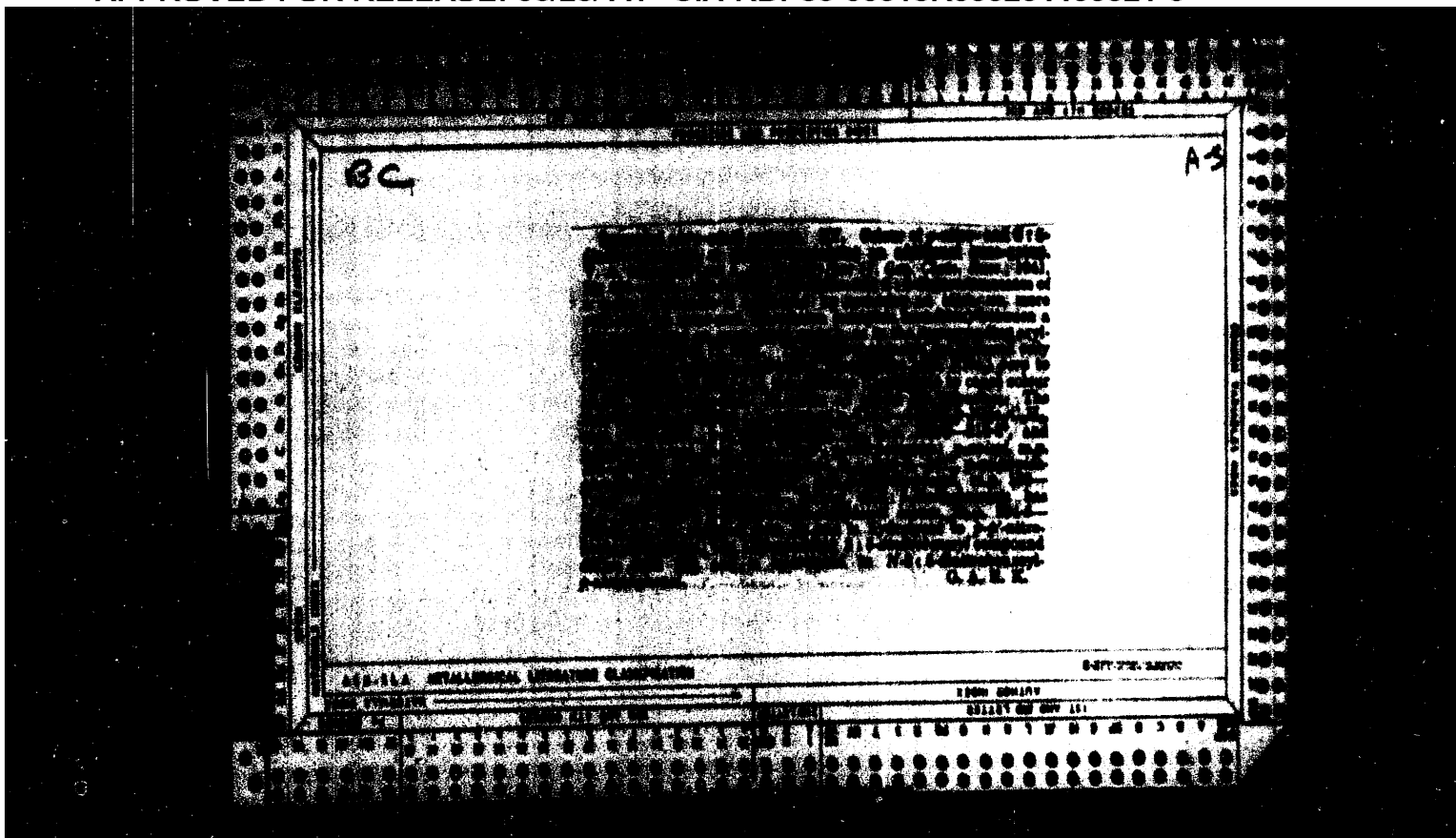
Pay greater attention to the lighting of shoe factories.
Kozh.-obyv. prom. 7 no.6:4-6 Je '65. (MIRA 18:8)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400021-6

BELOSVETOV, H.V.

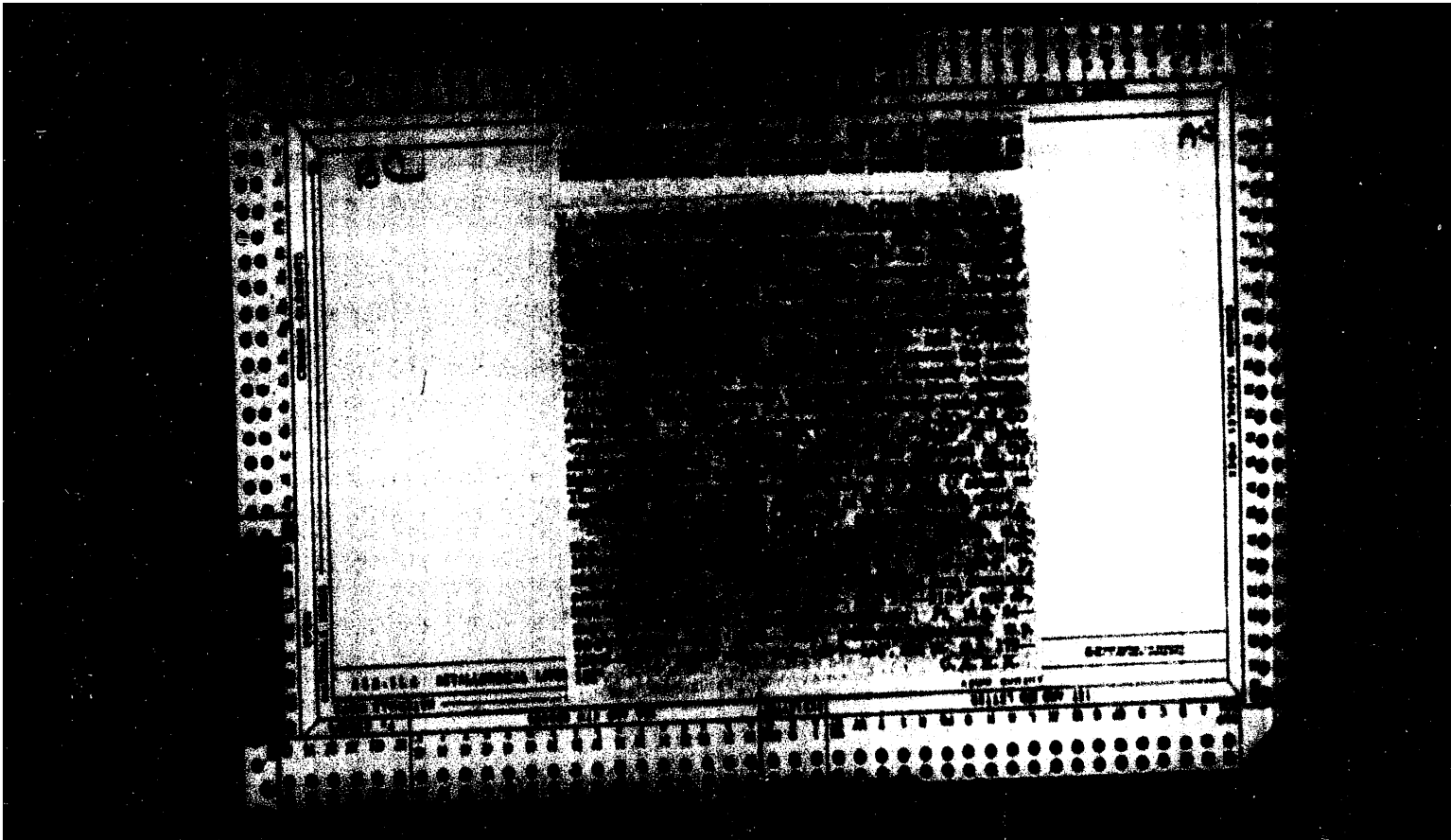
**Photographic decontaminators. A. V. Belosvetov and
V. A. Izmailovskii. Uspekhi Khim. 8, 540-60 (1939).**
**Remarks on the paper by Seyewitz (cf. C.A. 32, 607).
F. W. Rathmann**

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400021-6



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BELOTZVETOV, A. V.

"Separated Donor-Acceptor Systems. XII. On the Phenomenon of Colouration of Phthalimide-Propyl Ethers of Phenols." Belotzvetov, A. V. (p. 226)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 3.

BELOTSVETOV, A. V.

PA 67/29745

Subject - Naphthalene
Collection - Materials

May 49

The Synthesis of Compounds With Probable Anti-
cancer Properties: IV, 4-(Gamma-Dimethylamino-
propyl)-Anthro-1-Methoxy-Naphthalene, A. V. Belot-
svetov, Lab of Org Chem, Moscow City Pedagogical
Inst named V. P. Potemkin, 52 pp

"Zhur Obshch Khim" Vol XIX, No 5 959-964

Describes the synthesis of this product from alpha-
naphthol and its properties. Detected no activity
during a test on Plasmodium relictum. Found that,
during the extraction of 4-nitro-1-methoxy-naphthalene

67/29745

Chemistry - Naphthalene (Contd) May 49

by nitrating the methyl ether of alpha-naphthol
with 38% nitric acid, a by-product of 2,4-dinitro-
alpha-naphthol with a theoretical yield of 15%
is produced. Submitted 29 Mar 48.

67/29745

MPSHTEYN, D.A., prof.; IZMAIL'SKIY, V.A., prof.; BARANNIK, V.P., dots.;
BELOTSVETOV, A.F., dots.; SMIRNOVA, M.I., tekhn. red.

[Programs of pedagogical institutes; elements of chemical technology for natural science-faculties of pedagogical institutes]
Programmy pedagogicheskikh institutov osnovy khimicheskoi tekhnologii dlia fakul'tetov estestvoznaniia pedagogicheskikh institutov. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1956. 12 p. (MIRA 11:9)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye vysshikh i srednikh pedagogicheskikh uchebnykh zavedeniy.
(Chemistry, Technical--Study and teaching)

BESKOV, Sergey Dmitriyevich, prof.; BELOTSVETOV, Aleksay Vsevolodovich;
KLYUCHNIKOV, Nikolay Grigor'yevich; ~~SLAVIN, David Osipovich;~~
SYRKIN, Z.N., red.; TSIPPO, R.V., tekhn.red.

[Fundamentals of chemical technology; textbook for pedagogical
institutes] Osnovy khimicheskoi tekhnologii; uchebnoe posobie
dlya pedagogicheskikh institutov. Pod obshchei red. S.D.Beskova.
Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1959. 319 p.
(MIRA 12:12)

(Chemical engineering)

5.44500

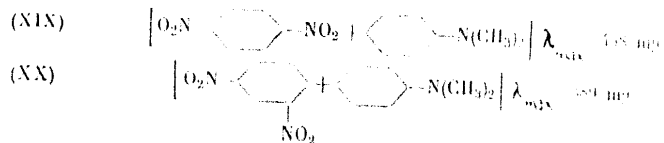
(1958)
SOV/19-50-2-9/10

AUTHORS: Ismail'skiy, V. A., Belotsvetov, A. V.

TITLE: Counterpolarized Systems and Chromaticity. V. Absorption Spectra of m- and p-Dinitrobenzenes and of their Molecular Complexes With Dimethylaniline. (Concerning Analysis of Structural Influences upon the Spectrum. 1a)

PERIODICAL: Zhurnal obshchey khimii, 1960, vol 30, No 2, pp 393-402 (USSR)

ABSTRACT: The authors studied the effect of the relative position of two electrophilic chromophores (O₂N-radicals) upon the absorption spectra of para- and meta-dinitrobenzenes alone and in the presence of dimethylaniline, with which it forms molecular complexes (XIX and XX).



Chem 1/1

Counterpolarized Systems and
Chromaticity. V.

77848
SOV/77-10-1-1/74

Absorption spectra of dinitrobenzenes are shown in Fig. 4, while Fig. 5 represents absorption spectra of dinitrobenzene complexes (with dimethylaniline). It can be seen that the spectrum of p-dinitrobenzene is shifted toward the long wave lengths as compared with the meta-isomer. The bathochromic shift is even more pronounced for the molecular complex $(p-(O_2N)_2C_6H_4 + C_6H_5NMe_2)$.

Thus, the rule of Kauffmann (H. Kauffmann, Ber., 39, 2722 (1906), 44, 2586 (1911), 52, 1433 (1919)) concerning the bathochromic shift in the system with two electron-donor groups in para-position, as compared to the meta-isomer, can be applied to the systems with electrophilic groups. The bathochromic effect is explained by the authors as due to electronic displacements which take place in the para-isomer upon exposure to light and cause xx molecular deformations and a shift to a pseudobiradical system (XXII below) with subsequent increase in electrophilic properties.

Chem. 2/4

Counterpolarized Systems and
Chromaticity. V.

77858
SOV/19-30-2-9/78

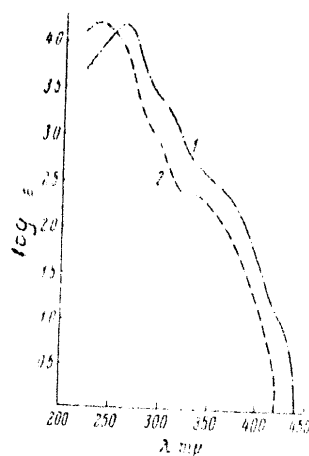


Fig. 2. Absorption spectra in alcohol.
(1) p-dinitrobenzene; (2) m-dinitrobenzene.

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Counterpolarized Systems and
Chromaticity. V.

77818
SOV/10-30-2-9/75

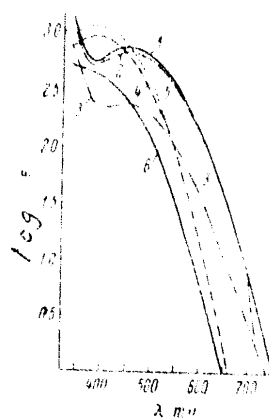


Fig. 3. Absorption spectra. (1) p-dinitrobenzene in dimethylaniline, conc. of dinitrobenzene $5 \cdot 10^{-2}$ M; (2) the same, conc. 10^{-2} M; (3) p-dinitrobenzene in 20% solution of dimethylaniline in alcohol. (Caption cont. on next page)

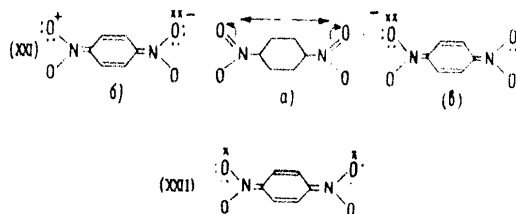
Card 4/6

Counterpolarized Systems and
Chromaticity. V.

77893
SOV/79-50-1-1/78

(Caption con't.)

alcohol, conc. 10^{-2} M; (4) m-dinitrobenzene in dimethyl-
aniline, conc. $5 \cdot 10^{-2}$ M; (5) the same, conc. 10^{-2} M;
(6) m-dinitrobenzene in 20% solution of dimethylaniline
in alcohol, conc. 10^{-2} M.



Counterpolarized Systems and
Chromaticity. V.

77858
SOV/79-30-2-3/73

There are 5 figures; 2 tables; and 31 references, 15
Soviet, 4 German, 1 French, 2 U.K., 9 U.S. The 5
most recent U.K. and U.S. references are: H. Lubs.,
Chem. of Synthetic Dyes and Pigments, N.Y., 670 (1955);
H. Gilman., Organic Chemistry, Vol III, 165 (1953);
G. W. Wheeland, Resonance in Organic Chemistry, N. Y.,
283 (1955); L. Doub, J. Vandennelt, J. Am. Chem. Soc.,
71, 2414 (1949); P. Fielding, J. Le Fevre, J. Chem.
Soc., 1950, 2812.

ASSOCIATION:

SUBMITTED:

Moscow V. P. Potemkin Pedagogical Institute (Moskovskiy
pedagogicheskiy institut imeni V. P. Potemkina)
February 4, 1959

Card 6/6

BELOTSVETOV, A.V.

Isolated chromophoric systems. Part 32: Spectral color phenomena exhibited by aryl amides of ρ -nitro- α -phenylcinnamic acid and α -(ρ -nitrophenyl)-cinnamic acid. Zhur. ob. khim. 31 no.1:59-68 Ja '61. (MIRA 14:1)

1. Moskovskiy pedagogicheskiy institut imeni V.I. Lenina..
(Cinnamic acid--Spectra)

BESKOV, Sergey Dmitriyevich, prof.; BELOTSVETOV, Aleksey Vsevolodovich;
KLYUCHNIKOV, Nikolay Grigor'yevich; SLAVIN, David Osipovich;
METEL'SKAYA, G.S., red.; ZAYTSEVA, K.F., red. kart; MAKHOVA,
N.N., tekhn. red

[Principles of chemical technology] Osnovy khimicheskoi tekhnologii;
posobie dlia studentov pedagogicheskikh institutov. [By] S.D.
Beskov i dr. Izd.2., ispr. i dop. Moskva, Uchpedgiz, 1962. 406 p.
(MIRA 16:1)

(Chemistry, Technical)

UGRYUMOV, Pavel Grigor'yevich; AVERBUKH, Anatoliy Yakovlevich;
BELOTSVETOV, A.V., dots., retsenzent; L'VOV, S.V., prof.,
retsenzent; KOZLOV, V.V., red.

[Organic synthesis in industry; a manual for teachers and
students of pedagogical institutes. Organicheskii sintez v
promyshlennosti; posobie dlia uchitelei i studentov pedago-
gicheskikh institutov. Izd.2., perer. i dop. Moskva, Pro-
sveshchenie, 1964. 318 p. (MIRA 17:7)

KLYUCHNIKOV, Nikolay Grigor'yevich; BELOTSVETOV, A.V., dots.,
retsenzent; BAULINA, V.V., red.

[Practical work in chemical technology] Prakticheskie
zaniatia po khimicheskoi tekhnologii. Izd.3., perer.
Moskva, Prosveshchenie, 1965. 262 p. (MIRA 18:6)

BELOTSVETOV, Andrey Vsevolodovich; KOPILEVICH, Ye.I., redaktor; MEDVEDEV,
L.Ia., tekhnicheskii redaktor

[Increasing the power coefficient in electric plants of light industry enterprises] Povyshenie koeffitsienta moshchnosti v elektro-
ustanovkakh predpriatii legkoi promyshlennosti. Moskva, Gos.
nauchno-tekhn. izd-vo Ministerstva promyshl. tovarov shirokogo
potrebleniia SSSR, 1954. 141 p. (MLRA 8:6)
(Electric power) (Russia—Manufactures)

BELOTSVETOV, A. V.

AUTHOR: Kireyev, M.I., Engineer

94-4-17/25

TITLE: Scientific-technical Conference on Problems of Static Electricity (Nauchno-tekhnicheskoye soveshchaniye po bor'be so staticheskim elektrichestvom)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol.13, no.4, pp. 32 - 3 (USSR).

ABSTRACT: The Central Management of the All-Union Chemical Society imeni D.I. Mendeleev (Vsesoyuznoye khimicheskoye obshchestvo imeni D.I. Mendeleeva), together with the Ministry of the Chemical Industry of the USSR (Ministerstvo khimicheskoy promyshlennosti SSSR), called a scientific-technical conference on problems of static electricity. The conference met in Moscow on December 16 - 18, 1957 and six reports were read. Prof. I.S. Royzen gave a mainly theoretical report on static electricity and methods of dealing with it. Candidate of Technical Sciences V.S. Medvedeva dealt with the ionisation of air by means of radio-active substances. Engineer A.V. Belotsvetov described the construction of radio-active ionisers. Senior Scientific Assistant Borisov indicated present practice in lightning protection. A proposed standard for protection against static electricity and secondary effects of lightning

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Scientific-technical Conference on Problems of Static Electricity 94-4-17/25

was described by B.L. Kaner.

The conference showed that methods of dealing with static electricity have not yet been sufficiently studied. The addition of conductive substances to insulating materials can reduce their potential. Radio-active substances can be helpful when other methods fail.

The conference decided to ask the appropriate authorities to establish the static electricity characteristics of a number of substances and to determine the humidity required in the atmosphere to avoid danger from static. The Scientific Research Institute of the rubber industry should develop conductive rubbers. The use of radio-active substances for volume ionisation needs investigation and thermal ionisers should be studied and manufactured.

AVAILABLE: Library of Congress
Card 2/2

ARNOL'DI, I.A., red.; BELOUSOV, A.Z., red.; GOFMEKLER, V.A., red.;
BEL'CHIKOVA, Yu.S., tekhn.red.

[Hygienic problems in the acclimatization of the population
in the Far North] Gigienicheskie voprosy akklimatisatsii
naseleniia na Krainem Severe. Moskva, Medgis, 1961. 261 p.
(MIRA 14:12)
(RUSSIA, NORTHERN--MAN--INFLUENCE OF CLIMATE)

BELOTSVETOV, Yu. V. Cand Tech Sci -- (diss) "Analysis of ^{high}circuits of multiple frequency conversions applicable to systems of peripheral radio communication." Mos, 1959. 17 pp (Min of Communications USSR. Mos Electrical Engineering Inst of Communications), 150 copies Printed by ~~typing~~ ^{duplicating} machine. (KL. 45-59,145)

BELOTSVETOV, Yu.V.; TEREENT'YEV, B.P.

Possibility of fractional multiplication and division of frequency.
Nauch. dokl. vys. shkoly; radiotekh. i elektron. no.2:117-125 '59.
(MIRA 14:5)

1. Kafedra radioperedayushchikh ustroystv Moskovskogo elektrotekhnicheskogo instituta svyazi.
(Frequency changera)

BELOTSVETOV, Y. V.

Ю. В. Белосветов

Анализ систем многократного преобразования частот

II. СЕКЦИЯ РАСПРОСТРАНЕНИЯ РАДИОВОЛН

Руководитель: Я. А. Жуков

9 июля

(с 10 до 12 часов)

Специальное заседание с участием общей радиотехники

А. В. Прохор

В. Ф. Губин

Исследования вопросов теории распространения волн при различных распространениях УКВ

А. В. Прохор

Г. М. Сидоров

Н. П. Леонов

Экспериментальные исследования распространения волн при различных трансформациях распространения

Ю

(с 12 до 16 часов)

В. А. Белосветов

Н. А. Архангельский

О влиянии потерь энергии на распространение волн при различных трансформациях распространения ультракоротких радиоволн

А. В. Шабалин

К вопросу о применении метода моментов при исследовании волн многократного рассеяния в неограниченной среде

В. А. Косов

Ф. Г. Бон

К теории распространения радиоволн в среде со случайными неоднородностями при различных условиях распространения

9 июля

(с 16 до 22 часов)

А. В. Мам

С. Я. Бруси

В. В. Горбачев

Физические основы теории распространения радиоволн в среде со случайными неоднородностями

report submitted for the Confidential Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in. A. S. Popov (VSEUR), Moscow,
8-12 June. 1959

SOV/106-59-6-4/14

AUTHORS: Belotsvetov, Yu.V., and Terent'yev, B.P. (Professor,
Dr.Tech.Sci.)

TITLE: A Frequency-Divider Circuit Using a Pulse-Phase Detector
(Skhema deleniya chastoty s ispol'zovaniyem
impul'sno-fazovogo detektora)

PERIODICAL: Elektrosvyaz', 1959, Nr 6, pp 25-30 (USSR)

ABSTRACT: The article describes a frequency-divider circuit which enables a dividing ratio "n" of the order of several hundreds to be obtained.

$$n = \frac{f_{\text{ref}}}{f_{\text{out}}} \quad (1)$$

where f_{ref} and f_{out} are the reference and the controlled frequency respectively. The block diagram is given in Fig 1. The sinusoidal voltage of the controlled oscillator (v_{osc}) is converted to a pulse of duration τ_u in the pulse forming stage (PF). The duration of the pulse is chosen so that

$$\tau_u = T_{\text{ref}} (m + 0,5) \quad (4)$$

Card 1/3 where T_{ref} is the period of the reference frequency and $m = 0, 1, 2, \dots$. The pulse is compared in phase

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A Frequency-Divider Circuit Using a Pulse-Phase Detector

with the voltage of the reference frequency in the pulse-phase detector (PPD). If the frequency ratio of one to the other is not a whole number, then at the output of the pulse-phase detector appears a voltage with a frequency f_p equal to

$$f_p = f_m \frac{\Delta f_{vg}}{f_{vg}} \quad (5)$$

This controlling voltage is passed through a low-frequency filter (LFF) to a reactive valve (RV) which controls the frequency of the controlled oscillator. The frequency of the controlled oscillator will change until its harmonic nf_{vg} equals the reference frequency. The natural frequency of the controlled oscillator should be near to

$$f_{vg} = \frac{f_m}{n}$$

and for stable operation, the stability of the controlled oscillator

$$\Delta f_{vg} = \frac{\Delta f_{vg}}{f_{vg}} \quad (2)$$

must not be worse than $1/2n$

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30V/106-59-6-4/14

A Frequency-Divider Circuit Using a Pulse-Phase Detector

$$\nu_{\text{wp}} \ll \frac{1}{2n} \quad (3)$$

The experimental circuit (Fig 3) is described and the experimental results given. The controlled oscillator operated at 10 kc/s with values of n from 1 to 750. The locking-on and holding-on characteristics, the amount of parasitic frequency-modulation, the temperature stability, and the stability against supply voltage variation, were investigated. Finally, this type of frequency-divider is recommended for use in cases where: 1) $n > 20$; 2) a frequency net, free from low frequency harmonics, is required; 3) an ultra-low frequency oscillator (of the order of 1 - 0.1 c/s) is required. Transistors can be used for all the stages and the circuits then become very compact and economical. There are 6 figures, 1 table and 1 Soviet reference.

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SUBMITTED: November 15, 1958

67378

9.3260
AUTHORS: Belotsvetov, Yu.V., and Terent'yev, B.P. SOV/106-59-9-5/13
TITLE: Analysis of Frequency-Multiplier Circuits with a Pulse-Phase Detector 25

PERIODICAL: Elektrosvyaz', 1959, Nr 9, pp 35-43 (USSR)

ABSTRACT: The block diagram of a frequency-multiplier circuit with a pulse-phase detector is given in Fig 1. (Fig 2 gives a similar diagram for a frequency-divider circuit). Block 1 is the local driving oscillator tuned to a frequency approximately n times smaller than the reference frequency f_0 . The output voltage of the local oscillator is converted in the pulse-forming circuit (block 3) into pulses, the duration and shape of which are not critical. These pulses must satisfy only one condition: their spectrum must contain the n th harmonic of the local oscillator frequency. The generated pulses are compared in phase with the reference voltage in the pulse-phase detector (block 5). The constant component (or the low-frequency voltage) from the detector is filtered in the low-frequency pass filter (block 4) and applied to the grid of the control element (block 2). This element tunes the local oscillator until

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Analysis of Frequency-Multiplier Circuits with a Pulse-Phase Detector

its frequency is equal to one n th part of the reference frequency. In practical circuits, such as described in the author's previous work (Ref 1) values of n between 500 and 800 can be easily obtained. The authors then show how the locking-on and hold-on bands depend on the parameters of the filter. It is shown from theoretical considerations and experimental results (Table 1) that the output voltage of the detector is proportional to the harmonic used, and further that the interaction of the pulse train and the sinusoidal reference voltage in the pulse-phase is equivalent to the action of two sinusoidal voltages, one of which is the n th harmonic of the pulses of the synchronising train. This is generalised to the application of any two periodical time-functions to any multiplying circuit, providing that a voltage is obtained at the output of the non-linear circuit which has an angular frequency $\Delta\omega = n\omega_1 - k\omega_2$. Providing that ω_1 and ω_2 are related by some whole numbers p and l , then integers n and k can be found, such that $\Delta\omega = 0$. Then

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Analysis of Frequency-Multiplier Circuits with a Pulse-Phase Detector

the detector output will have a constant component, the magnitude of which is determined by the phase difference of the harmonics

$$\Delta\varphi = \varphi_n - \varphi_k$$

After filtering, this constant component can be used for tuning either of the original functions. Furthermore, since this is a d.c. voltage, RC filters and other circuits, having "inertia" can be connected in the circuit. Thus, the hold-on regime can be described by the usual differential equations applicable to a phase, automatic frequency control system having equal controlled and reference frequencies. From these equations, the locking-on band is obtained from

$$\Omega_p = \omega_{pm} \frac{\Delta\omega_{gr}}{\omega_{gr}} \quad (3)$$

where Ω_p is the angular frequency of the voltage formed as a result of a non-integer frequency multiplication; ω_{pm} is the reference angular frequency; ω_{gr} is the angular frequency of the controlled

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Analysis of Frequency-Multiplier Circuits with a Pulse-Phase Detector

oscillator. Before the voltage from the detector is applied to the grid of the control element (a reaction valve), it is modified by the transfer function of the filter. The well known function for a pulse system of phase, automatic frequency control with an integrating filter

$$\ddot{\Theta} + \Theta 2\lambda + F(\Theta) = \delta \quad (4)$$

is used. Θ is the variable phase difference; 2λ is the attenuation; $F(\Theta)$ is the normalised characteristic of the phase detector; δ is the relative detuning increment. This equation was considered in previous works (Refs 2, 3, 4) for the case when $F(\Theta) = \cos \Theta$ and the relationship (Eq 5) between the relative locking-on band $\delta_0 = \Delta \omega_0 / \Omega$ and the dimensionless time constant of the filter $\Delta = (8/\pi) \Omega T_\Phi$ (T_Φ is the filter time constant) was evolved. Fig 3 shows graphs of δ_0 against Δ . The author next investigates the stability of the circuit by using the frequency method described in Refs 5 and 6, and application of the Nyquist criterion. The following conclusions are made.

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SOV/106-59-9-5/13

Analysis of Frequency-Multiplier Circuits with a Pulse-Phase Detector

1) With small values of T_0 , the region of stability reduces with increase in the proportional part (R_1 and C_1 of Fig 4) of the proportional-integrating filter. With T_0 large, the stable region increases under the same conditions. 2) When $T_p/T = 0.01-0.25$ (where T_p is the period of the pulse train), the stable region increases as the value of the proportional part of the filter is increased from zero. After attaining some optimum value the stable region begins to decrease. Finally, the authors consider the case for a half-T section LCR filter for which Eq (13) is applicable. The results of the analysis were checked experimentally. The circuits used were as given in Ref 1 and also in Fig 8. The experimental details and procedure are described.

Card
5/5

There are 8 figures, 1 table and 9 references, of which 8 are Soviet and 1 English.

SUBMITTED: February 25, 1959

BEIOTTI, J.

"Planning the grain seed production of cereal plants in a district." p. 77.
(Nowe Rolnictwo, Vol. 2, no. 7, July 1953. Warszawa.)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress,
Feb. 1954, Uncl.

BMIOTTI, J.

"Classification of Crops for Seed Before Harvesting", P. 53, (NIEZBOLNISTWO,
Vol. 3, No. 6, June 1954, Warszawa, Poland).

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 8, No. 5,
May 1955, Uncl.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400021-6

BELOTTI, J.

"Surplus seed in collective farms." (p. 95) NOWE ROLNICTWO (Panstwowe Wydawnictwo Rolnicze i Leśne) Warszawa, Vol. 3, No. III, Mar. 1954.

SO: East European Accessions List, Vol 3, No. 8, August 1954

BELOTTI, JULIAN.

BELOTTI, JULIAN. Dobrze ziarno siewne zbraz. (1. wyd.) Warszawa, Państwowe Wydawn. Rolnicze i Lesne, 1956. 111 p. (Good cereal grain for sowing. 1st ed.)

DA

Not in DAC

AGRICULTURE
Poland

So: East European Accession, Vol. 6, No. 5, May 1957

BELOUN, Frantisek

Autumn meeting of the Central Committee of the Union of Czechoslovak
Mathematicians and Physicists. Pokroky mat fyz astr 9 no.2: 130-131
164

BELOUN, Frantisek

"Combining the theory and the practice in teaching mathematics"
by V.G. Procuchajev. Reviewed by Frantisek Beloun. Pokroky
mat fyz astr 7 no.4:250-251 '62.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400021-6

ANICHKOV, Sergey Viktorovich, and BELOUS, A. A.

"Mechanism of the Antidiuretic Effect of Ganglionic Poisons." Zef. Zhur., Vol 33,
No 6, 1947, p 787. Chair of Pharmacology, 2nd Leningrad Med Inst.

SO: U-4396

BELOUS, A. A.

27908. BELOUS, A. A. — Deystvie Glyukozy na serdech no-sosu distuyu sistemu. Trudy leningr. San.-Gigiyen. Med. In-ta, T. II, 1949, S. 183-92.— Bibliogr: 10 Nazv. KOZO-POLYANAKIY, B. M. "Ancher" A. S. Pushkina i vozmozhnost' otravleniya rasteniyami na rasstoyanii.— Sm. 27661.

SO: Letopis' Zhurnal'nykh Statey. Vol. 37, 1949.

BNLOUS, A.A.; GREBENKINA, M.A.

Conditioned reflexes from the carotid chemoreceptors. *Fiziol. zh. SSSR* 39 no.5:591-593 Sept-Oct 1953. (CML 25:4)

1. Department of Pharmacology, Institute of Experimental Medicine of the Academy of Medical Sciences USSR, Leningrad.

ILLEGIBLE

USSR/Medicine - Pharmacology

FD-2507

BELOUS, A. A.

Card 1/1

Pub 17-6/20

Author : Belous, A. A.

Title : ~~Towards the pathogenesis of experimental pituitrin hypertension~~
Towards the pathogenesis of experimental pituitrin hypertension

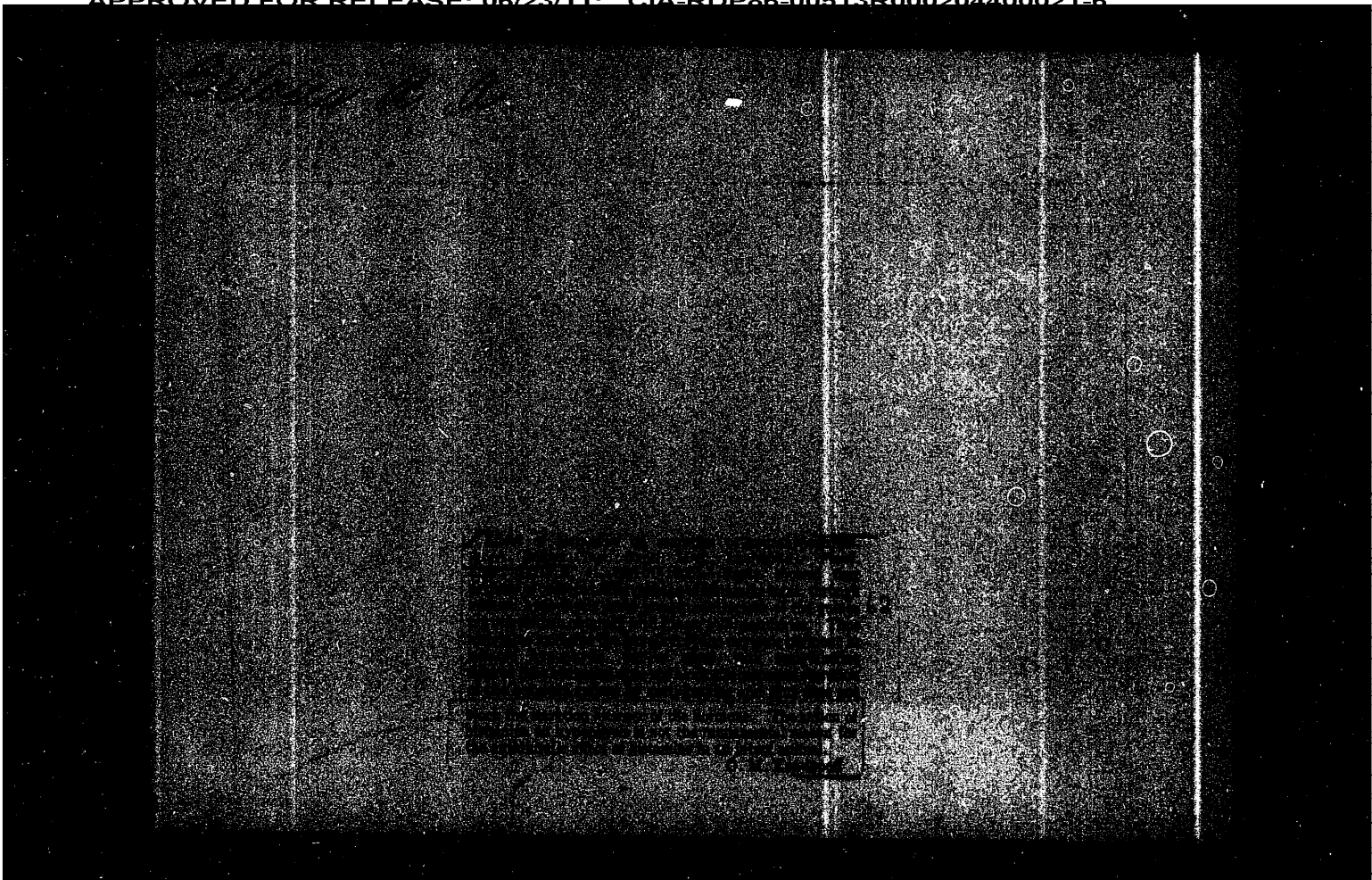
Periodical : Byul. eksp. biol. i med. 4, 25-28, Apr 1955

Abstract : Investigated the possibility of the appearance of renin in the urine of dogs on prolonged intravenous injection of pituitrin. Graphs; table. Two references, one of these USSR (1950).

Institution : Department of Pharmacology (Head - Prof. S. V. Anichkov, Member of the Academy of Medical Sciences USSR) of the Institute of Experimental Medicine of the Academy of Medical Sciences USSR, Leningrad

Submitted : June 26, 1954 by S. V. Anichkov, Member of the Academy of Medical Sciences USSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400021-6



Be/003-A1A

N1

BELOUS, AA.

USSR/Pharmacology. Toxicology. Ganglioblocking Drugs. V-4

Abs Jour : Ref Zhur-Biol., No 6, 1958. 28049

Author : Belous A. A., Magakyan G. O.

Inst : Institute of Experimental Medicine Academy of
Medical Sciences USSR.

Title : Experimental Pharmacotherapy of Hypertonia in
Simians.

Orig Pub : Yezhegodnic. in-t eksperim, med. Akad. med.
nauk SSSR, 1955, L., 1956, 167-169.

Abstract : The effect of hexonium (1; an analogue of hexa-
methonium) on blood pressure (BP) was studied in
5 simians with persistent spontaneous hypertonia
(SH) and coronary insufficiency (CI) electrocar-
diographically registered, and in 3 simians with

Card 1/2

USSR/Pharmacology. Toxicology. Ganglioblocking Drugs. V-4

Abs Jour : Ref Zhur-Biol., No 6, 1958. 28049.

Abstract : experimental pituitrinary hypertonia (PH) also accompanied by CI. 1 was administered by mouth in doses of 0.2 g twice daily for a period of 3 weeks. In 3 of the 5 monkeys with SH and in all 3 monkeys with PH blood pressure dropped to normal. In the other 2 monkeys with SH blood pressure remained high. A considerable diminution of modifications characteristic of CI (the negative T-wave became positive; if an extra systole was present, it disappeared) was noted in a number of monkeys on the electrocardiogram. The contracting capacity of the myocardium improved. The authors recommend the application of 1 in hypertonia accompanied by CI.

Card 2/2

Belous, A. A.

In the article, "Experimental Pharmacotherapy of Hypertonia and Coronary Insufficiency in Simians With Hexonium," A. A. Belous and G. O. Magalyan, of the Sukhumi Medico Biological Station of the Academy of Medical Sciences USSR and the Division of Pharmacology of the Institute of Experimental Medicine of the academy, describe experiments conducted on simians establishing that hexonium, a preparation synthesized at the Division of Pharmacology and identical with the foreign preparation hexamethonium widely used abroad, is a highly effective hypotensive agent. It normalizes blood pressure and has a favorable effect on coronary circulation; normal pressure may be retained for as long as two months after administration of the drug is halted. Electrocardiograms taken of the animals during the period of therapy with hexonium revealed improvement in venous circulation. Hexonium is not effective in coronary insufficiency of long standing. (Farmakologiya i Toksikologiya Vol 20, No 2, Mar/Apr 77, pp 15-21) (U)

Sum In 1167

USSR / Human and Animal Physiology (Normal and Patho- T
logical). Blood. Blood Pressure. Hypertonia

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97537

Author : Belous, A. A., Magakyan, G. O.

Inst : Not given

Title : Experimental Pituitrin Hypertension and Coronary
Insufficiency in Monkeys

Orig Pub: Byul. eksperim. biol. i med., 1957, No 1, Priilo-
zheniye, 17-21

Abstract: Nine rhesus monkeys were given daily, for 18 to 22
days, 0.5 to 0.6 milligrams of pituitrin (I) intra-
venously. In seven monkeys, irrespective of ori-
ginal value of blood pressure, stable hypertonia
arose. In six animals, from the 11th to 16th

Card 1/2

USSR / Human and Animal Physiology (Normal and Patho- T
logical). Blood. Blood Pressure. Hypertonia

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97537

day of introduction of I, negative T-waves in standard and IV thoracic abductions appeared. In a part of the animals, atrial and ventricular extracystole were noted. Changes of cardiac activity were retained by all animals during two to seven months after discontinuation of I introduction. One of the factors which assist the rise of hypertension may be the hormones of the posterior lobe of hypophysis. --G. A. Levitina

Card 2/2

Belous, A.A.
BELIOUS, A.A. (Leningrad)

Endocrinoneural factors in the pathogenesis of hypertension [with summary in English, p.124]. Probl.endok. i gorm. 3 no.3:18-24 My-Je '57. (MIRA 10:10)

1. Iz oddela farmakologii Instituta eksperimental'noy meditsiny AMN SSSR.

(HYPERTENSION, etiology and pathogenesis, endocrine-neural factors (Rus))

(ENDOCRINE GLANDS, in various diseases, hypertension, aetiology, role of endocrine-neural factors (Rus))

(NERVOUS SYSTEM, in var. dis. same)

EXCERPTA MEDICA Sec.3 Vol.12/4 Endocrinology April 58
BELCUB, A.A.

644. ACTIVATION OF NEUROHYPOPHYSEAL SECRETION AFTER OCCLUSION OF RENAL BLOOD SUPPLY (Russian text) - Belous A. A. Dept. of Pharmacol., Inst. of Exp. Med., Leningrad - FIZIOL. ZH. 1957, 43/3 (240-244)
Tables 2

After unilateral temporary occlusion of renal blood supply, pituitrin-like as well as renin-like pressor substances were secreted by both kidneys of two dogs. Pituitrin-like urinary extracts were also found to acquire a considerable oxytocic activity preceding the development of high blood pressure. In one of the dogs the rise in oxytocic activity preceded liberation of the pressor renin-like factor, which suggests the possibility that stimulation of the neurohypophysis may be due to a reflex from the kidney.

Simonson - Minneapolis, Minn. (II, 3)

BELOUS, A.A.

Effect of pituitrin on the development of experimental atherosclerosis.
Biul. eksp. biol. i med. 47 no.3:27-30 Mr '59. (MIRA 12:7)

1. Iz otdela farmakologii (zav. - deystvitel'nyy chlen AMN SSSR S. V. Anichkov) Instituta eksperimental'noy meditsiny (dir. - chlen-korrespondent AMN SSSR D. A. Biryukov) Leningrad. Predstavlena deystvitel'nyy chlenom AMN SSSR S. V. Anichkovym.

(ARTERIOSCLEROSIS, experimental,
eff. of pituitrin on atherogenesis (Rus))
(PITUITARY GLAND, POSTERIOR, hormones,
pituitrin, eff. on exper. atherogenesis (Rus))

BELOUS, A.A.; SKLYAROVA, P.G.

Pharmacotherapy for experimental arthritis in rabbits. Farm. i
toks. 24 no.4:467-469 JI-Ag '61. (MIRA 14:9)

1. Kafedra farmakologii (zav. - prof. A.A.Belous) Stalinagradskego
gosudarstvennogo meditsinskogo instituta.
(ARTHRITIS) (ADIPHENINE)

BELOUS, A. A.

Ustoichivost' oval'nykh i ramnykh shpangoutov. Moskva, 1937. 34 p., illus.,
diags. (TSAGI. Trudy, no. 334)

Title tr.: Stability of oval and frame bulkheads of fuselages.

QA911.M65 no. 384

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

BELOUS, A. A.

Opredelenie chastot sobstvennykh kolebaniy fermenrykh lonzheronov.
Moskva, 1939. 12 p., (TSAGI. Tekhnicheskie zametki, no. 197)

Title tr.: Determination of natural vibration frequency of truss longerons.

TL570.M6 no. 197

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955

BELOUS, A. A.

Vibratsii motoustanovok s zhestkimi i elastichnymi krepleniami
zvezdoobraznogo motora. Moskva, 1940. 46 p., illus. (TSAGI. Trudy, no. 499)

Title tr.: Vibrations of radial engine mounts equipped with rigid and resilient
fittings.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955

BELOUS, A.A.
USSR/Mathematics -- Book Review

FD-2632

Card 1/1 : Pub. 41-18/21

Author : Belous, A. A.

Title : Review of K. Snitko's book "Methods of designing installations for vibrations and shock." 1953, Moscow-Leningrad

Periodical : Izv. AN SSSR, Otd. Tekh. Nauk 4, 149-155, Apr 1955

Abstract : Presents an unfavorable review of Snitko's book on the design of installations to withstand shock and vibration. Takes particular exception to author's equations for four moments. Prints excerpts from book and indicates corrections to be made. Formulae, table.

Institution :

Submitted : February 27, 1955

BELOUS, I.A.

Retaining springs. Mashinostroitel' no.5:19 My '60.
(Fastenings) (MIRA 14:5)

BELOUS, A.A.; GOFMAN, S.M.

Effect of pituitrin on blood coagulation in experimental
pituitrin hypertension. Farm. i toks. 25 no.5:587-590
S-O '62 (MIRA 12:1)

1. Kafedra farmakologii (zav. - prof. A.A. Belous) Volgogradskogo meditsinskogo instituta.

ARKHIPOV, Konstantin Nikolayevich; ~~BELOUS, Aleksei Alekseyevich~~; LITVINEN-
KO, V.M., redaktor; YEPISHKINA, A.V., redaktor; KARASIK, N.P., tekhnicheskiiy redaktor.

[Fire prevention in wood industries] Protivopozharnaya tekhnika v
lesnoi promyshlennosti. Moskva, Goslesbumizdat, 1954. 197 p.
(Fire prevention)(Wood-using industries) (MIRA 8:4)

ARKHIPOV, K.M.; BELOUS, A.A.; YAICHKOV, K.M., kandidat tekhnicheskikh nauk, rezensent; GORBACHEV, I.N., inzhener-polkovnik, redaktor; SHPAYER, A.L., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskii redaktor.

[Fire prevention in enterprises of the building materials industry]
Protivopozharnaya tekhnika na predpriyatiyakh promyshlennosti stroitel'nykh materialov. Izd. 3-e, dop. i ispr. Moskva, Gosizd-vo lit-ry po stroit. materialam, 1955. 254 p. (MLRA 9:5)
(Building material industry) (Fire prevention)

KOVSMAN, Ye.P.; TYURIN, Yu.M.; KARAVAYEVA, Ye.A.; Primali uchastiye: BELOUS, A.B.; TSYBULEVSKAYA, A.M.

Anodic dissolution of some noble metals in organic media. Zhur.prikl.khim.
37 no.1:217-218 Ja '64. (MIRA 17:2)

1. Lisichanskiy filial Gosudarstvennogo instituta azotnoy promyshlennosti.

BEIOUS, A.I.

About A.E. Khotko's article, Zemledelie 6 no.2:86-88 '58.
(MIRA 11:3)

1. Direktor Ukrainskogo nauchno-issledovatel'skogo instituta
oroshayemogo zemledeliya.
(Agriculture)

BELOUS, A.L.; KUZNETSOV, K.F.; KUROCHKIN, S.S.; PASECHNIKOVA, I.P.;
PETROVA, L.F.

Characteristics of a set of transistorized elements of a magnetic
memory unit. Nauch.-tekh.sbor.Gos.izd-va lit. v obl. atom. nauki i
tekh. no.4:25-43 '62. (MIRA 16:10)

AM4008910

BOOK EXPLOITATION

S/

Belov, A. F.; Belous, A. L.; Kusnetsov, K. F.; Kurochkin, S. S.;
Salichko, V. N.

The AI-2048 digital storage system and information processing
(Tsifrovaya sistema nakopleniya i obrabotki informatsii /AI-2048/)
Moscow, Gosatomizdat, 63. 0145 p. illus., biblio. Errata slip
inserted. 5,100 copies printed.

TOPIC TAGS: multichannel digital system, multichannel digital
instrument, amplitude coding, duration coding, ferrite memory,
rectangular hysteresis loop, arithmetic unit, program unit, input
unit, readout unit, statistical distribution instrument

PURPOSE AND COVERAGE: The book is devoted to the AI-2048 multi-
channel digital system, which is used for measurement and data
reduction in nuclear physics. The system comprises specialized
input units (pulse height into digital code converter, time inter-
val into digital code converter, coding units), a ferrite-core
rectangular hysteresis loop memory for 2048 eighteen-digit numbers
designed on the coinciding half-current principle, an arithmetic

Card 1/3

AM4008910

unit, a program control unit for 1024 commands, and a series of output devices. All blocks and units of the system except the fast input units are transistorized. The system can be used to measure statistical distribution of electric-signal parameters (i.e., as a pulse analyzer), for control of some commercial objects, etc. The output of the computer is displayed in analog form as well as in digital form. The AI-2048 was developed under the guidance of S. S. Kurochkin, aided by A. F. Belov (control unit), A. L. Belous (operative memory) and V. N. Salichko (arithmetic unit). Chapter I was written by Kurochkin, Sec. 4 of Ch. II by Belous, Kurochkin, and Kuznetsov, Sec. 5 of Ch. II by Kurochkin and Salichko, Sec. 6 of Ch. II by Belov and Kurochkin, and Ch. IV by Kurochkin, Belov, and Salichko. The remainder was written jointly.

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Ch. I. General description of AI-2048 system - -	7
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Ch. III. Description of individual elements (blocks) of the
system - - 97

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SUB CODE: CP, NS

SUBMITTED: 17Apr63

NO REF SOV: 011

OTHER: 008

DATE ACQ: 30Nov63

Card 3/3

KUROCHKIN, S.S.; BELOV, A.F.; BELOUS, A.L.; SALICHKO, V.N.; ABUZINA, I.N.;
KURKOV, Ye.V.; KUZNETSOV, K.F.; STERLIGOV, D.A.

Principle transistorized components of multichannel measuring
systems. Mnogokan. izm. sist. v iad. fiz. no.5:87-116 '63.
(MIRA 16:12)

ACCESSION NR: AT3012187

S/2963/63/000/005/0117/0127

AUTHOR: Kurochkin, S. S.; Belous, A. L.; Kuznetsov, K. F.; Kurkov, Ye. V.

TITLE: Sectionalized variant of magnetic operating memory for 2048 numbers

SOURCE: Mnogokanal'ny*ye izmeritel'ny*ye sistemy* v yadernoy fizike. Nauchno-tehnicheskii sbornik. Moscow, no. 5, 1963, 117-127

TOPIC TAGS: memory, magnetic memory, operative memory, sectionalized memory, memory cube, address selection unit, transistorized current generator

ABSTRACT: The structure and test results of a memory unit consisting of standard elements are considered from the point of view of operation of the magnetic memory as a unit and the performance of the standard elements used in the memory. The design is sectional-

Card 1/2

ACCESSION NR: AT3012187

ized so that the memory consists of 8 memory cubes each for 256 numbers, an address selection unit, a unit for reading and writing the number codes, and transistorized current generators for reading and writing. The operation of the memory and the test results are described. Although this memory is not the most economic from the point of view of equipment utilization, its advantage is that it can operate with low-power transistorized current generators. The reading system ensures high signal to noise ratio and some of its features may be useful in the construction of large size memories. Orig. art. has: 9 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 16Oct63

ENCL: 01

SUB CODE: NS; SD

NO REF SOV: 003

OTHER: 000

Card 2/2

BELOV, A.F.; BELOUS, A.L.; KUBOCHKIN, S.S.; SARACHKO, V.E.

Technological control of the electric parameters of units,
assemblies, and measuring systems. Nauch.-tekh. sbor. Gos. izd-va
lit. v obl. atom. nauki i tekhn. no.6:76-92 '63 (MIRA 17:6)

KUROCHKIN, S.S., kand. texhn. nauk; BEROV, A.F.; BERG, A.I.; CHERN, V.N.

Dynamic method for quality testing of units. Nauch.-t.-n. abstr.
Gos. izd-va lit. v obl. atom. nauki i tekhn. no.6:1977, 163
(MIRA 17:3)

I 45811-66 EWT(d)/EWT(1)/EWP(1) IJP(c) BB/GG
ACC NR: AR6023256

SOURCE CODE: UR/0058/66/000/003/AD46/AD47

AUTHOR: Kurochkin, S. S.; Belov, A. F.; Belous, A. L.; Krashenninnikov, I. S.; Salichko, V. N.; Rekhin, Ye. I.; Fateyev, V. A.

TITLE: A kit of units and blocks for multichannel and multidimensional analyzers

SOURCE: Ref zh. Fizika, Abs. 3A408

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 63-78

TOPIC TAGS: multichannel analyzer, pulse height analyzer, computer component, computer coding/ BAP amplitude code converter, BVP time code converter, BDP coordinate code converter, BZU memory unit, BAU arithmetic unit, BUU control unit, BZ printer, BZ perforator, BZ tape storage, BO oscilloscope block, BUO oscilloscope control

ABSTRACT: The authors consider the characteristics of a kit of units and blocks for multichannel and multidimensional analyzers. All the units of the kit are matched both with respect to the input and output resistances, accuracy, range of measured quantities, and operating speed. The parameters of the blocks are guaranteed at a temperature $20 \pm 15^\circ\text{C}$ and a relative humidity $70 \pm 10\%$. The blocks are designed for supply voltages ± 6 , 12, 27, and 100V, with stability $\pm 0.5\%$. The kit includes the following: input units, circuits for the accumulation and processing of information, output devices, and power supplies. The parameters of the following units are presented: 1) BAP-5 and BAP-7 pulse amplitude into code converters; 2) BVP-5 time intervals into digital code converters; 3) devices BDP-7 and BDP-8 for the transformation of the coordinates of pickups, targets, samples, etc. into a digital code; 4) BZU-15,

Card 1/2

I 45811-66

ACC NR: AR6023256

7
BZU-16, BZU-17, BZU-18, BZU-19, BZU-20, BZU-22, and BZU-23 analyzer memory units;
5) ~~BAU-16~~ and BAU-17 arithmetic units; 6) ~~BUU-3~~ BUU-16, and BUU-17 analyzer control
blocks; 7) BZ-15 and BZ-22 numbers printers; 8) BZ-17 and BZ-18 perforators; 9) BZ-20
magnetic tape storage; 10) ~~BO-5~~ oscillograph block, BUO-2-5 oscillograph control
block, and a few other devices. A table is presented, in which data on the applica-
tions of the listed blocks are summarized. Yu. Semenov. [Translation of abstract]

SUB CODE: 09

LS
Card 2/2

L 36049-66 EWT(1)
ACC NR: AR6014193

SOURCE CODE: UR/0271/65/000/011/B014/B014

AUTHOR: Belous, A. L.; Kurochkin, S. S.; Pashvykin, V. V. Pekhov, G. P. 47
B

TITLE: Storage for 4096 numbers intended for multichannel and multivariate
analyzers 25

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 11B122

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 114-130

TOPIC TAGS: computer, computer storage device, MULTICHANNEL ANALYZER

ABSTRACT: From the reliability and economy viewpoints, it is expedient to use 3- and 4-coordinate address devices operating on the coincident half-current system for synthesizing storages for multichannel and multivariate analyzers. Storage devices with transistor-transformer switches and a 3-coordinate address system are described. The operation of the following elements is examined: a 4096-channel storage cube, read-signal amplifiers, current-pulse shaper, and auxiliary elements. The operation of a storage with diode-transistor bridge switches and its elements (address switches and address-current generator) is considered. Tests of the above storage system revealed its operability at a supply voltage variation of 2.5--9.5 v. Twelve figures. Bibliography of 3 titles. N. P. [Translation of abstract]

SUB CODE: 09

Card 1/1 vmb

UDC: 681.142.652.2

L 08333-67 EWT(1)

ACC NR: AR6033768

SOURCE CODE: UR/0058/66/000/007/A029/A029

AUTHOR: Kurochkin, S. S.; Belous, A. L.; Salichko, V. N.

TITLE: AI-16000 measuring apparatus

40

SOURCE: Ref. zh. Fizika, Abs. 7A256

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radielektron.
T. 3, Ch. 1. M., Atomizdat, 1965, 137-148

TOPIC TAGS: oscilloscope, computer component, multichannel analyzer, measuring apparatus, memory core/BZU-20 memory core, BAU-15, BAU-16 arithmetic device, BUU-16, BUU-17 control device, AI-16000 measuring apparatus, AI-4093-3 analyzer, BK-10 communications unit, AI-4096 analyzer

ABSTRACT: An AI-16000 measuring apparatus is examined. It includes three AI-4096-3 and one AI-4096-2 analyzers, a BK-10 communications unit, and collections of input and output units. Each AI-4096 analyzer can be used autonomously and can perform single-dimensional amplitude time analysis or multi-channel calculation of events, as well as two-dimensional analysis of various types. Each analyzer moreover registers up to 4096 18-digit codes and events coming in at 16 microseconds and at wider intervals. The measuring apparatus uses standard BZU-20 memory cores, BAU-15 and BAU-17 arithmetic devices,
Card 1/2

L 08333-67

ACC NR: AR6033768

and BUU-16 and BUU-17 control devices. The BZU-20 memory cores of all analyzers can be used as a single storage unit with a total of 16,000 channels. Counters measuring the processes, and joined to the signal transformers of the counters in a digit code, are used as input devices. Analog and also digital information output is possible on the oscilloscope, on tape, and on the card puncher, etc. Special diagrams and programs have been worked out to control the work of the measuring apparatus. [Translation of abstract]

SUB CODE: 09/

2/2 net
Card

L 08329-67

ACC NR: AR6033769

SOURCE CODE: UR/0058/66/000/007/A029/A029

AUTHOR: Kurochkin, S. S.; Belous, A. L.; Belov, A. F.; Krashenninnikov, I. S.; Rekhin, Ye. I.; Salichko, V. N.

TITLE: Multichannel and multidimensional analyzers AI-1024, AI-2048, and AI-4096

SOURCE: Ref. zh. Fizika, Abs. 7A257

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 3. Ch. 1 M., Atomizdat, 1965, 171-181

TOPIC TAGS: pulse analyzer, computer, multidimensional analyzer, AI-024 pulse analyzer, AI-2048 pulse analyzer, AI-4096 pulse analyzer, AI-1024-3 analyzer, AI-1024-2 analyzer, AI-2048-3 analyzer, AI-2048-2 analyzer, AI-4096-2 analyzer, AI-4096-3 analyzer

ABSTRACT: A study is made of AI-1024, AI-2048, and AI-4096 pulse analyzers, each of which features modifications. The AI-1024-3, AI-2048-3, and AI-4096-3 analyzers differ from AI-1024-2, AI-2048-2, and AI-4096-2 analyzers in that they have branching control devices and arithmetic devices and permit a more complex processing of information. The analyzers are based upon an active memory core made with ferrite tori with a 16 μ sec registration cycle, an arithmetic device, a control device on

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ferrite-type cores, a power supply unit ensuring the standard stabilized voltages ± 6 , ± 12 , and ± 27 v. Counters of measured processes are used as input units. Analog as well as digital information output is possible. The main characteristics of the analyzers are presented in the form of tables. [Translation of abstract]

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ACC NR: AR7004313

SOURCE CODE: UR/0271/66/000/011/A048/A049

AUTHOR: Kurochkin, S. S.; Balous, A. L.; Belov, A. F.; Krashennnikov, I. S.;
Rekhin, Ye. I.; Salichko, V. N.

TITLE: Principal operating modes of multianalyzers AI-1024, AI-2048, and AI-4096

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 11A378

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 3.
Ch. 2. M., Atomizdat, 1965, 181-208

TOPIC TAGS: pulse height analyzer, ^{Digital analog counter, computer input unit} AI-1024 analyzer, AI-2048 analyzer, AI-4096
analyzer

ABSTRACT: These analyzers permit several types of measurement, yield information either in analog or in digital form, can process information, and perform simplest checking operations. They permit carrying out rapid time and two-dimensional analyses of the following forms: pulse-height and time analysis in consecutive time intervals, measurement of flux intensity at several points in consecutive time intervals, pulse-height-height analysis, pulse-height-time analysis, time-time analysis, pulse-height analysis of several independent random processes by means of several sensors, time analysis by means of several sensors. The connections required by each type of measurement are made automatically when the suitable input unit is set in. The

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ACC NR: AR7004313

analyzer can be started either manually or by an external signal. The analyzer can be stopped either manually, or by an external signal, or by a specified-exposure signal. The exposure can be specified: either by a "live" time, or by a specified number of pulses, or by a specified time lapse. The analog-type information is fed to an oscilloscope and a recorder. A number code taken from a given channel is fed to a register and further (in a potential digital form) is transferred to the oscilloscope control unit where a digital-to-analog converter is located. When the information is fed to the recorder, an integrating unit is also used. The information is fed to the oscilloscope and recorder according to a conventional program. The information is delivered at a rate of 5 or 20 lines per second. After one cycle of information has been completed, the next pulse starts a program of converting the number in the next channel. Check routines are used for checking the normal functioning of the analyzer. Eleven figures. Bibliography of 4 titles. B. U.
[Translation of abstract]

SUB CODE: ¹⁸09

Card 2/2

BELOUS, A.M.

Two cases of Ollier's disease. Ortop., travm.i protez. 21
no.1:72-74 Ja '60. (MIRA 13:12)
(CARTILAGE--DISEASES)

BELOUS, A. M.

Quantitative amount of some trace elements in bone regenerate at various periods of its formation. Ortop., travm. i protez. no.12: 33-39 '61. (MIRA 15:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii im. M. I. Sitenko (dir. - chlen-korrespondent AMN SSSR prof. N. P. Novachenko)

(TRACE ELEMENTS IN THE BODY) (BONES)

BELOUS, A.M.

Amount of some trace elements in regenerating tissues femoral fractures
in the frog. Biul. eksp. biol. i med. 52 no.12:96-100 D '61.

(MIRA 14:12)

1. Iz Ukrainського nauchno-issledovatel'skogo instituta ortopedii i
travmatologii imeni M.I.Sitenko (dir. - chlen-korrespondent AMN
SSSR prof. N.P.Novachenko) Khar'kov. Predstavlena deystvitel'ny
chlenom AMN SSSR S.Ye.Severinym.

(TRACE ELEMENTS) (FEMUR--FRACTURE)

(REGENERATION (BIOLOGY))